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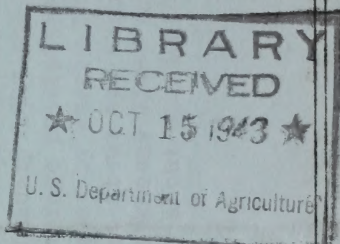
SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for the

MISSOURI and ARKANSAS

DRAINAGE BASINS

February 1, 1943



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Snow on the mountain tops
Assures the harvest of bounteous crops.

Issued by the
United States Department of Agriculture
Soil Conservation Service
Division of Irrigation
In Cooperation with
The Colorado Agricultural Experiment Station
Colorado State College
Fort Collins, Colorado

February 10, 1943

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SNOW SURVEYS AND IRRIGATION WATER FORECASTS FOR MISSOURI AND ARKANSAS RIVERS

February 1, 1943

The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by the Division of Irrigation, Soil Conservation Service, of the U. S. Department of Agriculture, in cooperation with State departments, other Federal bureaus and local organizations. The snow measurements are made principally by field personnel of the following organizations: Forest Service, National Park Service, Bureau of Reclamation, U. S. Geological Survey, War Department and State Experiment Stations. This work is otherwise conducted cooperatively with the State Engineers of Wyoming and Colorado, and various municipalities, irrigation associations, power companies and others. Precipitation records are supplied by the U. S. Weather Bureau.

P R E C I P I T A T I O N D A T A

WATERSHED	STATE	Precipitation October 1 to January 31	Departure from Normal	Precipitation January	Departure from Normal
		Inches	Inches	Inches	Inches
Missouri	East. Mont.	2.72	+0.24	0.99	+0.46
Missouri	Cent. Mont.	4.01	+0.85	1.29	+0.60
Missouri	North Wyo.	7.04	+3.09	1.81	+1.05
North Platte	Wyoming	4.38	+1.06	0.89	+0.68
South Platte	Colorado	5.60	+1.90	0.53	-0.14
Arkansas	Colorado	3.71	+0.54	0.41	-0.12

Since October first the accumulation of precipitation over the Missouri drainage, in Montana, was nearly one inch above normal and in Wyoming the excess was three inches. During January 1943 the average was well above normal. Over the head waters of the North Platte, in Wyoming, the average precipitation, October 1 to January 31st, was about one inch above normal and for January it was in excess by nearly three-quarter inch. For the upper drainage of the South Platte in Colorado the precipitation was about two inches above normal for the October-January period and below normal for last month. On the upper Arkansas River drainage the four-months accumulation was about one-half inch above normal and during January about one-tenth below.

SUMMARY OF FEBRUARY 1 SNOW SURVEYS AND COMPARISON OF DATA

WITH THAT OF PREVIOUS YEARS BY WATERSHEDS

WATERSHEDS	Snow Depth		Water Content		Number courses in average	Snow Density		1943 Water Content in Percent of	
	Eight Year Avg.*	1942	1943	Eight Year Avg.*		1942	1943	Eight Year Avg.*	1942
	In.	In.	In.	In.		Percent	Percent	Percent	Percent
MISSOURI RIVER									
Jefferson River	30.1	32.0	48.1	8.0	3	25	25	169	159
Madison River	45.5	41.1	74.5	10.3	6	27	25	193	230
Gallatin River	28.0	33.2	39.9	7.0	3	24	21	166	159
Missouri River**	22.6	22.5	36.0	6.1	4	24	27	178	157
Marias River	34.0	17.0	54.0	4.6	1	30	27	153	335
Shoshone River	49.7	36.6	93.1	9.7	1	28	26	202	287
Bighorn River	33.7	23.5	60.0	4.9	10	25	21	196	337
North Platte River	46.8	42.2	52.3	9.6	8	25	23	119	145
Sweetwater River	34.8	23.3	55.6	3.7	2	24	16	182	402
Laramie River	27.2	25.6	36.3	5.6	9	24	22	156	184
South Platte River***	18.7	20.6	23.3	3.7	3	18	18	162	149
Crow Creek	13.8	14.6	9.1	2.6	1	20	18	64	69
Poudre River	27.3	25.7	35.3	5.2	7	25	20	146	188
Big Thompson River	38.2	34.2	47.8	7.4	2	26	22	139	184
St. Vrain River	28.3	31.6	41.8	7.6	1	23	24	185	160
Boulder Creek	21.9	17.3	28.0	4.4	2	28	25	154	214
Clear Creek	37.0	31.8	47.1	6.4	2	24	20	143	197
ARKANSAS RIVER	29.9	27.2	37.2	5.5	8	22	20	128	151

*Some for shorter periods.

**Headwaters of Missouri River

***Above Denver, Colo.

WATER SUPPLY OUTLOOK

MONTANA. On the Missouri and its tributaries, the water content of the snow now exceeds by more than 50 percent the figures of February first last year. The largest increase was on Marias Pass where the water content is more than three times that of a year ago. Over this drainage area the soil moisture is approximately normal and reservoir storage a half more than last year at this time.

WYOMING. In the Big Horn mountains the snow cover is above normal. In the upper Wind River country, the water content of the snow is more than three times that of a year ago and twice the average over the past eight years. At Brook's Lake the snow depth is about 8 feet and holds 28 inches of water. During the fall and winter of the heavy snow cover in this section of the state. Soil moisture good to excellent. Because of the heavy snow cover at this time all reservoirs will be filled before the start of the irrigation season. Northern Wyoming will have an ample water supply for irrigation this coming season.

For the North Platte drainage, the present water content of the snow is a half more than last year and nearly a quarter more than the past eight-year average. The North French Creek and Old Battle snow courses, headwaters of the North Platte, are covered with a snow depth of 6 feet containing about 20 inches of water. Snow conditions in the North Park country are better than they were a year ago. Mountain soil moisture over this drainage is good with stream flow normal. Range conditions generally good. Reservoir storage excellent due to large carry over from last year. More than half million acre feet now held.

On the headwaters of the Laramie River the water content of the snow is nearly twice that of a year ago and a half more than the past eight-year average. At Brooklyn Lake the water content of the snow is 22 inches, last year 11 inches. Stream flow above normal. Soil moisture in the Laramie valley is fair to good and range and crop conditions good. Reservoir storage above normal.

The present outlook for the coming season's water supply, for both the North Platte and Laramie, is very favorable. Additional snow has accumulated since the last snow surveys were made on these drainages.

COLORADO. On the upper South Platte watershed, the water content of the snow was found to be a half more than a year ago at this time, and five-eighths better than the past eight-year average. Density of snow good. Mountain soil moisture is normal and stream flow normal. The mountain reservoir storage is excellent. In the lower valley, east of Denver, the moisture in the soil is normal, good flow in the river with all the principal reservoirs filled to safe capacity. Outlook for this valley is now favorable. For the Poudre the outlook is also promising. The average water content of the snow cover on this drainage is nearly double that of a year ago and a half more than the average. Reservoir storage is now well above normal. Conditions on the Big Thompson are now favorable for the coming season's irrigation supply. Stream flow is much above normal and reservoirs are well filled. For the St. Vrain drainage the water content of the snow is much above that of a year ago. The stream flow is good at this time and

The most common of the small, many-seeded fruits of the plant is the seed pod. It is a small, elongated, slightly curved structure, about 1/2 inch long and 1/8 inch wide. It is green when young, but turns brown as it matures. The seed pod is the fruit of the plant, and it contains the seeds. The seeds are small, round, and light brown in color. They are often found in the soil, and they are the most common type of seed found in the area. The seed pod is the fruit of the plant, and it contains the seeds. The seeds are small, round, and light brown in color. They are often found in the soil, and they are the most common type of seed found in the area.

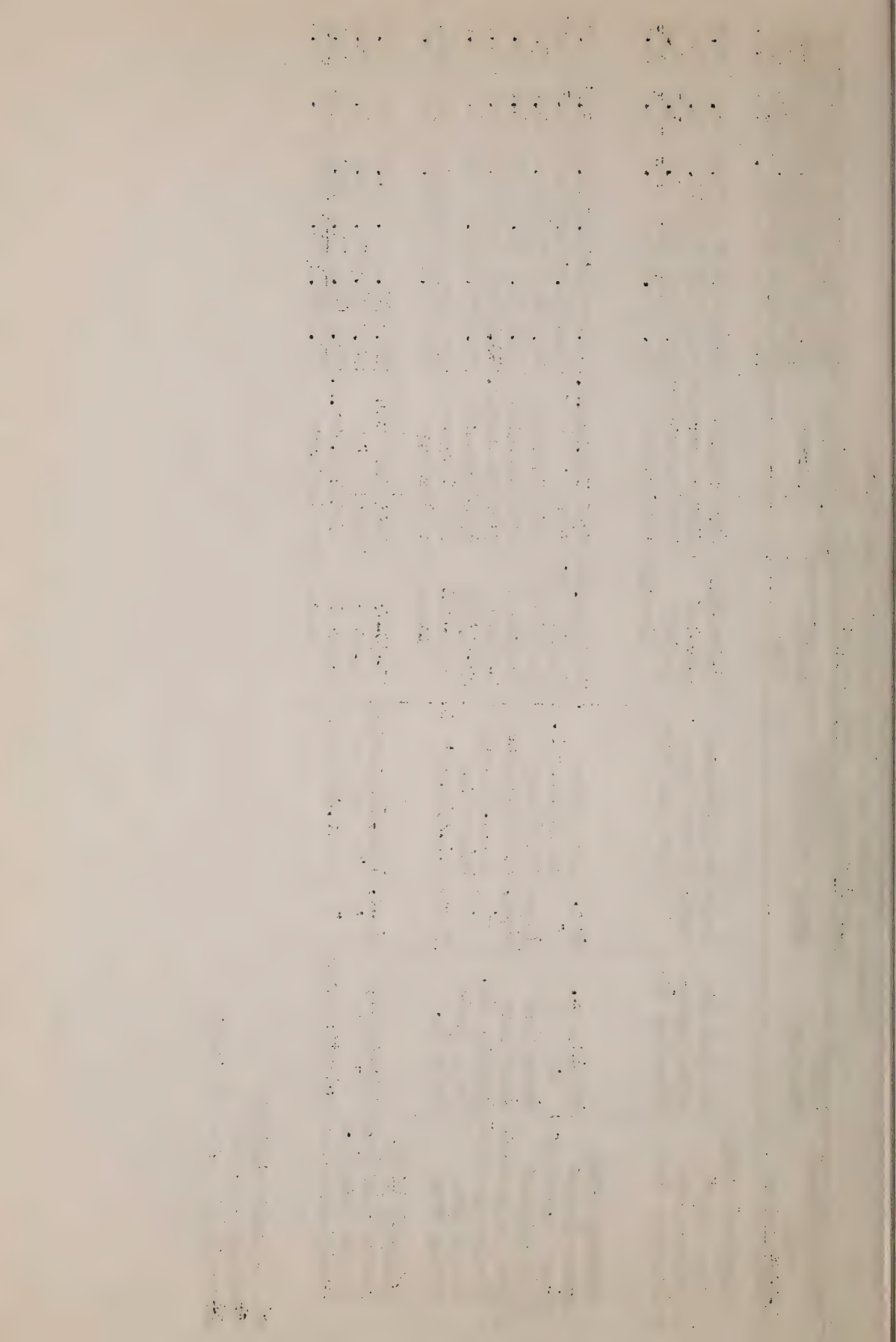
reservoir filling above normal. On the Boulder watershed the water content of the snow is double that of last year and also greater than the average by one-half. Conditions on the Clear Creek drainage indicate a favorable outlook. The present snow cover holds about double the amount of water in comparison with that of last year at this time. Reservoir filling is above normal. For all the South Platte tributaries, conditions are now favorable for a normal or better run-off this coming season. Areas below 7000 feet elevation bare of snow.

On the Arkansas watershed, the water content of the snow is about a half more than last year and a quarter more than the average. The flow of the river during the fall and winter has been well above normal, soil moisture and range conditions good, and reservoir storage the best in years. Some of the principal reservoirs were practically full at the close of the 1942 irrigation season and a large amount of river water left the state unused. Storage is now accomplished in the new John Martin Reservoir on the main river at Caddoa. The 1943 irrigation water supply for this valley is now very favorable.

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*On adjacent drainage

@Average for period of record



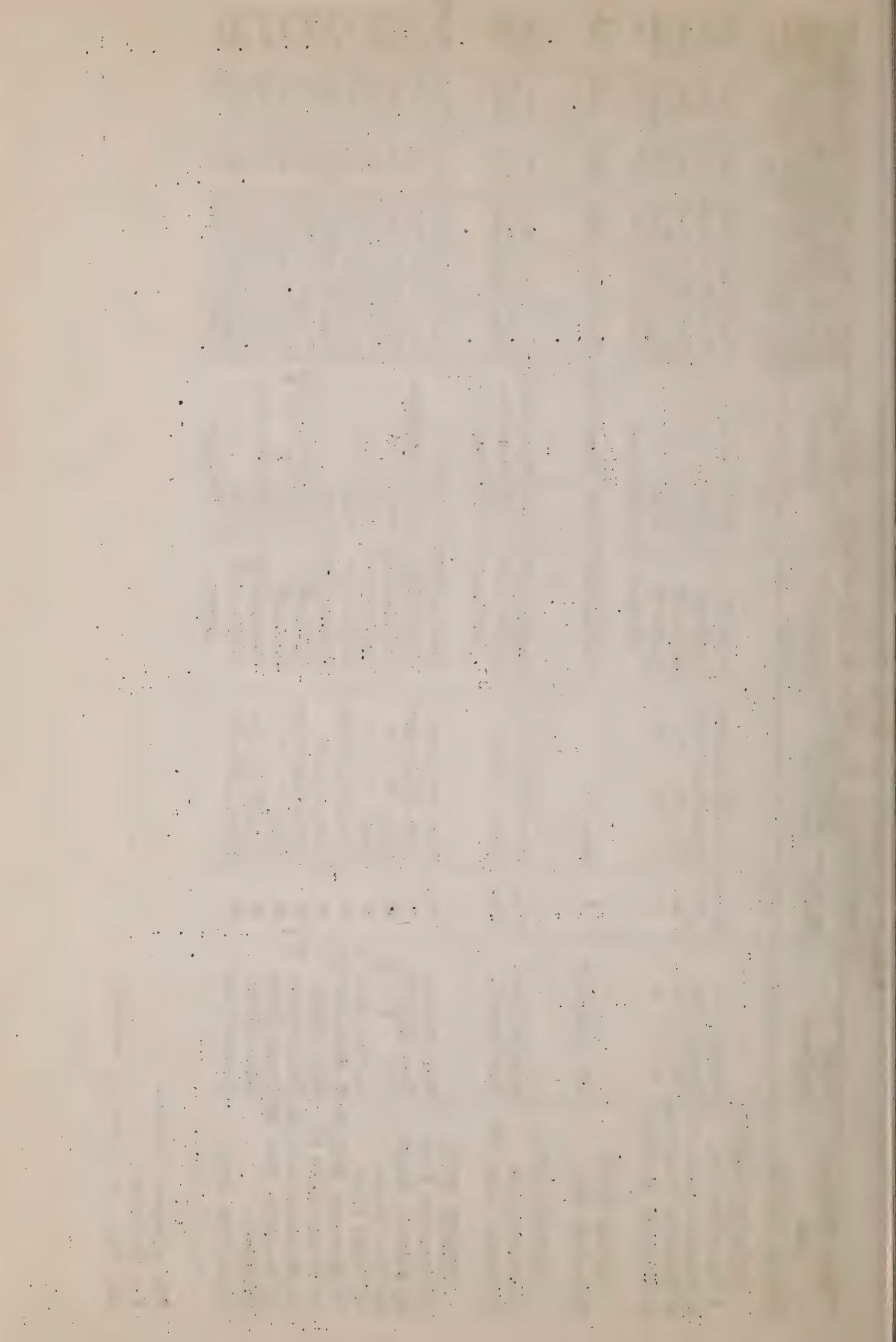
MISSOURI AND ARKANSAS RIVER WATERSHEDS
Summary of Federal and State Cooperative Snow Surveys
Issued February 10, 1943, at Fort Collins, Colo.

Main Drainage and Snow Course		Local Drainage	State	Location		Description	Elev.	National Forest	Feb. 1 Snow Cover Measurements					
No.	Snow Course	Drainage		Locality					Av. Snow Depth	Av. Water Content	Av. @ 1942	1943	In.	In.
MISSOURI RIVER														
6	Chessman Res.	Tennmile Cr.	Mont.	11mi. SW. Helena		2-8N-5W	6200	Helena	12.8	11.0	23.0	3.0	2.8	5.8
41	Tennmile Cr. Lower	Tennmile Cr.	"	17mi. SW. Helena		13-8N-6W	6250	"	20.1	20.0	32.0	4.5	5.1	8.2
42	Tennmile Cr. Middle	"	"	"		13-8N-6W	6800	"	26.8	27.0	42.0	6.3	7.6	11.0
43	Tennmile Cr. Upper	"	"	"		19-8N-5W	8000	"	30.9	32.0	47.0	7.8	8.8	13.5
						Average for Drainage			22.6	22.5	36.0	5.4	6.1	9.6
MARIAS RIVER														
20	Marias Pass	Two Medicine	"	Summit		48-3N-13-4W	5250	Glacier NP	34.0	17.0	54.0	10.1	4.6	15.4
SHOSHONE RIVER														
32	Sylvan Pass	Middle Creek	Wyo.	Sylvan Pass		12-52N-110W	7100	Yel. Nat. P.	--	--	65.3	--	--	19.3
50	Brooks Lake #3*	Shoshone R.	Wyo.	Brooks Lake		23-44N-110W	9200	Washakie	42.7	36.6	93.1	13.8	9.7	27.9
						Average for Drainage								
BIGHORN RIVER														
12	Togwotee Pass	Wind River	Wyo.	Togwotee Pass		29-44N-110W	9600	Teton	60.8	52.0	96.0	17.3	13.9	28.0E
45	Sawmill Glade	Popo Agie R.	"	13mi. SW. Lander		3-31N-101W	8500	Washakie	20.2	12.0	39.0	4.6	1.8	10.1
46	Blue Ridge	"	"	15mi. "		23-31N-101W	9500	"	30.2	18.2	56.2	7.1	3.3	14.8
47	South Pass	L. Popo Agie R.	"	19mi. "		13-30N-101W	9000	"	34.9	22.5	57.6	8.3	3.7	15.5
49	Sheridan Cr. R. S. #2	Sheridan Cr.	"	16mi. NW. Dubois		3-42N-109W	7500	"	27.4	17.2	46.3	6.2	2.4	12.4
50	Brooks Lake #3	Wind River	"	Brooks Lake		23-44N-110W	9200	"	49.7	36.6	93.1	13.8	9.7	27.9
51	St. Lawrence R. S.	St. Lawrence Cr.	"	27mi. NW. Lander		26-1N-4W	9000	Shos. I. R.	25.0	16.7	48.1	6.1	3.6	12.8
52	Mosquito Park RS	Trout Creek	"	18mi. "		23-28-3W	9500	"	31.6	27.2	55.8	6.7	4.4	13.6
53	DuNoir	Wind River	"	9mi. NW Dubois		27-42N-108W	8750	Washakie	31.4	21.6	53.3	7.7	4.3	14.5
54	T-Cross Ranch	Horse Creek	"	12mi. N. Dubois		1-43N-107W	8000	"	26.1	10.7	54.7	6.4	2.0	15.1
						Average for Drainage			33.7	23.5	60.0	8.4	4.9	16.5

*On adjacent drainage

E - Estimated

@Average for period of record



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Main Drainage and Snow Course		Local Drainage	State	Location		Description	Elev.	National Forest	Feb. 1 Snow Cover Measurements					
No.	Snow Course			Locality					Av. Snow Depth	Av. Water Content	Av. Snow Depth	Av. Water Content		
											1942	1943	1942	1943
											In.	In.	In.	In.
NO. PLATTE RIVER														
1	Cameron Pass	Michigan Cr.	Colo.	Cameron Pass	2-6N-76W	10300	Roosevelt	40.8	37.0	48.8	11.0	8.3	13.8	
7	Park View	Illinois Cr.	"	7mi. SE. Rand	24-5N-78W	9200	Routt	--	24.5	--	--	4.4	--	
8	Columbine Lodge	Grizzly Cr.	"	Rbt. Ears Pass	21-5N-82W	9300	"	53.8	51.9	64.4	13.3	11.7	17.2	
62	Willow Creek P.*	Illinois Cr.	"	Willow Cr. Pass	1-4N-78W	9500	Arapaho	--	31.8	--	--	7.1	--	
7	Bottle Creek	Encampment Cr.	Wyo.	7mi. SW. Encampment	24-14N-85W	8200	Medicine Bow	31.6	30.7	39.2	7.3	5.8	10.1	
8	Webber Spring	"	"	10mi. W.	27-14N-85W	9000	"	38.7	39.3	45.5	9.1	8.1	12.7	
9	Old Battle	"	"	12mi. W.	29-14N-85W	9800	"	63.8	63.5	74.0	16.9	16.2	21.5	
37	North French Cr.	N. French Cr.	"	Cent/Saratoga	27-16N-80W	10200	"	62.6	49.7	70.5	16.6	10.7	19.5	
38	N. Barrett Cr. #2	Barrett Cr.	"	"	30-16N-80W	9400	"	49.8	36.1	49.3	12.1	9.2	11.0	
39	Ryan Park #2	"	"	"	34-16N-81W	8400	"	33.2	29.3	26.8	7.4	6.6	5.3	
									46.8	42.2	52.3	11.7	9.6	13.9
AVERAGE for Drainage														
SWEETWATER RIVER														
29	Grannier Meadows	Rock Creek	Wyo.	20mi. SW. Lander	19-30N-100W	9000	Washakie	34.7	24.1	53.6	8.2	3.7	14.3	
47	South Pass*	"	"	19mi. "	13-30N-101W	9000	"	34.9	22.5	57.6	8.3	3.7	15.5	
									34.8	23.3	55.6	8.2	3.7	14.9
AVERAGE for Drainage														
LARAMIE RIVER														
3	Brooklyn Lake	Nash Fork	Wyo.	7mi. NW. Antennal	11-16N-79W	10200	Medicine Bow	41.6	35.5	61.9	12.6	10.7	22.1	
11	Fox Park	Fox Creek	"	Fox Park	21-13N-78W	9200	"	23.2	23.8	24.5	5.3	5.1	6.1	
34	Pole Mountain #2*	Soldier Cr.	"	10mi. SE. Laramie	35-15N-72W	8700	"	13.8	14.6	9.1	2.8	2.6	1.8	
35	Libby Lodge #2	Libby Creek	"	3mi. NW. Antennal	29-16N-78W	8700	"	22.5	18.5	38.3	5.1	4.0	10.9	
36	Hairpin Turn #2	Nash Fork	"	5mi. NW.	24-16N-79W	9500	"	25.4	20.2	43.0	6.3	4.7	12.2	
4	W. Port. G-P. Tunnel	Laramie R.	Colo.	4mi. N. Chambers L	7-8N-75W	8600	Roosevelt	21.5	22.0	24.4	5.0	3.1	6.1	
50	Deadman Hill*	Deadman Cr.	"	10mi. W. R. Feather	26-10N-75W	10200	"	31.7	32.9	42.2	7.3	6.0	11.6	
71	Deadman Hill #2*	Deadman Cr.	"	8mi. SW.	6-9N-74W	10200	"	26.8	28.0	34.6	5.7	5.2	8.7	
88	Roach	LaGarde Cr.	"	8mi. NW. Glendevy	5-10N-77W	9800	"	38.7	34.8	48.9	9.1	9.0	13.4	
									27.2	25.6	36.3	6.6	5.6	10.3
AVERAGE for Drainage														

*On adjacent drainage

@Average for period of record

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No.	Main Drainage and Snow Course	Local Drainage	Location		Elev.	National Forest	Feb. 1 Snow Cover Measurements			
			State	Locality			Av. Snow Depth	Snow Depth	Av. Water Content	Content
							Av. @ 1942	1943	Av. @ 1942	1943
							In.	In.	In.	In.
SOUTH PLATTE RIVER										
14	Hoosier Pass	S. Platte R.	Colo.	Hoosier Pass	11400	Pike	28.2	29.6	5.6	9.1
15	Fairplay	" "	"	Fairplay	10000	"	4.9	6.0	0.6	0.9
83	Jefferson Cr. #2	Jefferson Cr.	"	5 mi. NW. Jefferson	10100	"	23.0	26.1	4.0	6.6
				Average for Drainage			18.7	20.6	3.4	5.5
CROW CREEK										
34	Pole Mountain #2	Crow Creek	Wyo.	10 mi. SE. Laramie	8700	Medicine Bow	13.8	14.6	2.8	1.8
POUDRE RIVER										
1	Cameron Pass	Joe Wright Cr.	Colo.	Cameron Pass	10300	Roosevelt	40.8	37.0	11.0	8.3
2	Chambers Lake	Poudre River	"	Chambers Lake	9000	"	16.3	12.1	4.2	3.1
3	Big South	"	"	2 mi. E. Chambers L.	8600	"	5.8	4.5	1.2	0.5
50	Deadman Hill	N. Poudre R.	"	10 mi. W. R. Feather	10200	"	31.7	32.9	7.3	6.0
65	Lake Irene*	Big S. Poudre	"	1 mi. SW. Milner P.	10600	Ry. Mtn. N. P.	48.7	44.9	13.3	10.3
68	Hour Glass Lake	L. S. Poudre	"	2 mi. NW. Pingree P.	9500	Roosevelt	21.0	20.5	4.5	2.9
71	Deadman Hill #2	N. Poudre R.	"	8 mi. SW. R. Feather	10200	"	26.8	28.0	5.7	8.7
				Average for Drainage			27.3	25.7	6.7	9.8
BIG THOMPSON										
65	Lake Irene*	Big Thompson R.	Colo.	1 mi. SW. Milner P.	10600	Ry. Mtn. N. P.	48.7	44.9	13.3	17.3
95	Hidden Valley No. 2	Hidden Val. Cr.	"	9 mi. W. Estes B.	9550	" " "	27.6	23.4	6.2	9.9
				Average for Drainage			38.2	34.2	9.8	13.6
St. VRAIN RIVER										
41	Wild Basin	N. St. Vrain R.	Colo.	5 mi. W. Allens P.	10000	Ry. Mtn. N. P.	28.3	31.6	6.6	12.2
BOULDER CREEK										
5	E. Port. Moffat T.	S. Boulder Cr.	Colo.	East Portal	9400	Roosevelt	9.4	6.8	2.2	3.3
60	University Camp #2	N. Boulder Cr.	"	5 mi. SW. Ward	10300	"	34.4	27.8	10.0	15.5
				Average for Drainage			21.9	17.3	6.1	9.4

* On adjacent drainage

@ Average for period of record

The above are listed in order
 of increasing value
 of the property

Item	Quantity	Unit	Value	Remarks
1. 1000 lbs. of No. 10	1000	lbs.	10.00	
2. 500 lbs. of No. 10	500	lbs.	5.00	
3. 250 lbs. of No. 10	250	lbs.	2.50	
4. 125 lbs. of No. 10	125	lbs.	1.25	
5. 62.5 lbs. of No. 10	62.5	lbs.	0.625	
6. 31.25 lbs. of No. 10	31.25	lbs.	0.3125	
7. 15.625 lbs. of No. 10	15.625	lbs.	0.15625	
8. 7.8125 lbs. of No. 10	7.8125	lbs.	0.078125	
9. 3.90625 lbs. of No. 10	3.90625	lbs.	0.0390625	
10. 1.953125 lbs. of No. 10	1.953125	lbs.	0.01953125	
11. 0.9765625 lbs. of No. 10	0.9765625	lbs.	0.009765625	
12. 0.48828125 lbs. of No. 10	0.48828125	lbs.	0.0048828125	
13. 0.244140625 lbs. of No. 10	0.244140625	lbs.	0.00244140625	
14. 0.1220703125 lbs. of No. 10	0.1220703125	lbs.	0.001220703125	
15. 0.06103515625 lbs. of No. 10	0.06103515625	lbs.	0.0006103515625	
16. 0.030517578125 lbs. of No. 10	0.030517578125	lbs.	0.00030517578125	
17. 0.0152587890625 lbs. of No. 10	0.0152587890625	lbs.	0.000152587890625	
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32. 0.0000004656612873077392578125 lbs. of No. 10	0.0000004656612873077392578125	lbs.	0.000000004656612873077392578125	
33. 0.00000023283064365386962890625 lbs. of No. 10	0.00000023283064365386962890625	lbs.	0.0000000023283064365386962890625	
34. 0.000000116415321826934814453125 lbs. of No. 10	0.000000116415321826934814453125	lbs.	0.00000000116415321826934814453125	
35. 0.0000000582076609134674072265625 lbs. of No. 10	0.0000000582076609134674072265625	lbs.	0.000000000582076609134674072265625	
36. 0.00000002910383045673370361328125 lbs. of No. 10	0.00000002910383045673370361328125	lbs.	0.0000000002910383045673370361328125	
37. 0.000000014551915228366851806640625 lbs. of No. 10	0.000000014551915228366851806640625	lbs.	0.00000000014551915228366851806640625	
38. 0.0000000072759576141834259033203125 lbs. of No. 10	0.0000000072759576141834259033203125	lbs.	0.000000000072759576141834259033203125	
39. 0.00000000363797880709171295166015625 lbs. of No. 10	0.00000000363797880709171295166015625	lbs.	0.0000000000363797880709171295166015625	
40. 0.000000001818989403545856475830078125 lbs. of No. 10	0.000000001818989403545856475830078125	lbs.	0.00000000001818989403545856475830078125	
41. 0.0000000009094947017729282379150390625 lbs. of No. 10	0.0000000009094947017729282379150390625	lbs.	0.000000000009094947017729282379150390625	
42. 0.00000000045474735088646411895751953125 lbs. of No. 10	0.00000000045474735088646411895751953125	lbs.	0.0000000000045474735088646411895751953125	
43. 0.000000000227373675443232059478759765625 lbs. of No. 10	0.000000000227373675443232059478759765625	lbs.	0.00000000000227373675443232059478759765625	
44. 0.0000000001136868377216160297393798828125 lbs. of No. 10	0.0000000001136868377216160297393798828125	lbs.	0.000000000001136868377216160297393798828125	
45. 0.00000000005684341886080801486968994140625 lbs. of No. 10	0.00000000005684341886080801486968994140625	lbs.	0.0000000000005684341886080801486968994140625	
46. 0.000000000028421709430404007434844970703125 lbs. of No. 10	0.000000000028421709430404007434844970703125	lbs.	0.00000000000028421709430404007434844970703125	
47. 0.0000000000142108547152020037174224853515625 lbs. of No. 10	0.0000000000142108547152020037174224853515625	lbs.	0.000000000000142108547152020037174224853515625	
48. 0.00000000000710542735760100185871124267578125 lbs. of No. 10	0.00000000000710542735760100185871124267578125	lbs.	0.0000000000000710542735760100185871124267578125	
49. 0.000000000003552713678800500929355621337890625 lbs. of No. 10	0.000000000003552713678800500929355621337890625	lbs.	0.00000000000003552713678800500929355621337890625	
50. 0.0000000000017763568394002504646778106689453125 lbs. of No. 10	0.0000000000017763568394002504646778106689453125	lbs.	0.000000000000017763568394002504646778106689453125	
51. 0.00000000000088817841970012523233890533447265625 lbs. of No. 10	0.00000000000088817841970012523233890533447265625	lbs.	0.0000000000000088817841970012523233890533447265625	
52. 0.000000000000444089209850062616169452667236328125 lbs. of No. 10	0.000000000000444089209850062616169452667236328125	lbs.	0.00000000000000444089209850062616169452667236328125	
53. 0.0000000000002220446049250313080847263336181640625 lbs. of No. 10	0.0000000000002220446049250313080847263336181640625	lbs.	0.000000000000002220446049250313080847263336181640625	
54. 0.00000000000011102230246251565404236316680908203125 lbs. of No. 10	0.00000000000011102230246251565404236316680908203125	lbs.	0.0000000000000011102230246251565404236316680908203125	
55. 0.000000000000055511151231257827021181583404541015625 lbs. of No. 10	0.000000000000055511151231257827021181583404541015625	lbs.	0.00000000000000055511151231257827021181583404541015625	
56. 0.0000000000000277555756156289135105907917022705078125 lbs. of No. 10	0.0000000000000277555756156289135105907917022705078125	lbs.	0.000000000000000277555756156289135105907917022705078125	
57. 0.0000000000000138777878078144567552953958511353515625 lbs. of No. 10	0.0000000000000138777878078144567552953958511353515625	lbs.	0.000000000000000138777878078144567552953958511353515625	
58. 0.00000000000000693889390390722837764769792556767578125 lbs. of No. 10	0.00000000000000693889390390722837764769792556767578125	lbs.	0.000000000000000693889390390722837764769792556767578125	
59. 0.000000000000003469446951953614188823848962783837890625 lbs. of No. 10	0.000000000000003469446951953614188823848962783837890625	lbs.	0.0000000000000003469446951953614188823848962783837890625	
60. 0.0000000000000017347234759768070944119244813919189453125 lbs. of No. 10	0.0000000000000017347234759768070944119244813919189453125	lbs.	0.00000000000000017347234759768070944119244813919189453125	
61. 0.00000000000000086736173798840354720596224069595947265625 lbs. of No. 10	0.00000000000000086736173798840354720596224069595947265625	lbs.	0.00000000000000086736173798840354720596224069595947265625	
62. 0.000000000000000433680868994201773602981120347979736328125 lbs. of No. 10	0.000000000000000433680868994201773602981120347979736328125	lbs.	0.000000000000000433680868994201773602981120347979736328125	
63. 0.0000000000000002168404344971008868014905601739898681640625 lbs. of No. 10	0.0000000000000002168404344971008868014905601739898681640625	lbs.	0.0000000000000002168404344971008868014905601739898681640625	
64. 0.00000000000000010842021724855044340074528008699493408203125 lbs. of No. 10	0.00000000000000010842021724855044340074528008699493408203125	lbs.	0.00000000000000010842021724855044340074528008699493408203125	
65. 0.000000000000000054210108624275221700372640043497467041015625 lbs. of No. 10	0.000000000000000054210108624275221700372640043497467041015625	lbs.	0.000000000000000054210108624275221700372640043497467041015625	
66. 0.0000000000000000271050543121376108501863200217487335205078125 lbs. of No. 10	0.0000000000000000271050543121376108501863200217487335205078125	lbs.	0.0000000000000000271050543121376108501863200217487335205078125	
67. 0.00000000000000001355252715606880542509316001087436676025390625 lbs. of No. 10	0.00000000000000001355252715606880542509316001087436676025390625	lbs.	0.00000000000000001355252715606880542509316001087436676025390625	
68. 0.000000000000000006776263578034402712546580005437183380126953125 lbs. of No. 10	0.000000000000000006776263578034402712546580005437183380126953125	lbs.	0.000000000000000006776263578034402712546580005437183380126953125	
69. 0.0000000000000000033881317890172013562732900027185916900634765625 lbs. of No. 10	0.0000000000000000033881317890172013562732900027185916900634765625	lbs.	0.0000000000000000033881317890172013562732900027185916900634765625	
70. 0.0000000000000000016940658945086006781366450013592958450317328125 lbs. of No. 10	0.0000000000000000016940658945086006781366450013592958450317328125	lbs.	0.0000000000000000016940658945086006781366450013592958450317328125	
71. 0.00000000000000000084703294725430033906832250067964792251586640625 lbs. of No. 10	0.00000000000000000084703294725430033906832250067964792251586640625	lbs.	0.00000000000000000084703294725430033906832250067964792251586640625	
72. 0.000000000000000000423516473627150169534161250339823961257933203125 lbs. of No. 10	0.000000000000000000423516473627150169534161250339823961257933203125	lbs.	0.000000000000000000423516473627150169534161250339823961257933203125	
73. 0.00000000000000000021175823681357508476708062516991198062896640625 lbs. of No. 10	0.00000000000000000021175823681357508476708062516991198062896640625	lbs.	0.00000000000000000021175823681357508476708062516991198062896640625	
74. 0.000000000000000000105879118406787542383540312584955990314483203125 lbs. of No. 10	0.000000000000000000105879118406787542383540312584955990314483203125	lbs.	0.000000000000000000105879118406787542383540312584955990314483203125	
75. 0.0000000000000000000529395592033937711917701562924779951572416015625 lbs. of No. 10	0.0000000000000000000529395592033937711917701562924779951572416015625	lbs.	0.0000000000000000000529395592033937711917701562924779951572416015625	
76. 0.0000000000000000000264697796016968855958850781462389975786208078125 lbs. of No. 10	0.0000000000000000000264697796016968855958850781462389975786208078125	lbs.	0.0000000000000000000264697796016968855958850781462389975786208078125	
77. 0.00000000000000000001323488980084844279794253907311949878931040390625 lbs. of No. 10	0.00000000000000000001323488980084844279794253907311949878931040390625	lbs.	0.00000000000000000001323488980084844279794253907311949878931040390625	
78. 0.000000000000000000006617444900424221398971269536559749394655201953125 lbs. of No. 10	0.000000000000000000006617444900424221398971269536559749394655201953125	lbs.	0.000000000000000000006617444900424221398971269536559749394655201953125	
79. 0.0000000000000000000033087224502121106994856347682798746973276009765625 lbs. of No. 10	0.00000000000000000000330872245			

MISSOURI AND ARKANSAS RIVER WATERSHEDS
Summary of Federal and State Cooperative Snow Surveys
Issued February 10, 1943, at Fort Collins, Colo.

Main Drainage and No. Snow Course	Local Drainage	State	Location		Elev.	National Forest	Feb. 1 Snow Cover Measurements			
			Locality	Description			Av. Snow Depth	Av. Water Content	1942	1943
							In. In. In. In.	Av. In. In.		
CLEAR CREEK										
61	Loveland Pass #2	Colo.	10mi. W. Georgetown	27-4S-76W	10100	Arapahc	29.5	38.9	5.9	9.8
97	Grizzly Peak*	"	1mi. W. Loveland P	2-5S-76W	11250	"	44.6	55.3	11.6	15.3
	ARKANSAS RIVER			Average for Drainage			37.0	47.1	8.8	12.6
Tennessee Pass										
19	Tennessee Pass	Colo.	Tennessee Pass	21-8S-80W	10200	Cochetopa	25.2	32.9	4.6	6.7
21	Twin Lakes Tun.	"	9mi. W. Twin Lakes	22-11S-82W	10500	"	27.0	30.2	6.3	7.4
42	Marshall Creek*	"	Marshall Pass	24-48N-6E	10800	"	32.6	44.1	7.3	9.2
43	Poncha Creek	"	"	19-48N-7E	10500	"	26.5	35.7	6.8	8.9
72	Whiskey Creek #2	"	Whiskey Cr. Pass	37-2N10S-2W	10300	Maxwell Gr.	15.5	18.1	3.8	3.5
74	LaVeta Pass #2*	"	LaVeta Pass	22-28S-70W	9300	San Cristobal	20.8	22.2	4.2	5.1
78	Four Mile Park #2	"	3mi. SW. Twin L.	23-11S-81W	9700	Cochetopa	12.6	11.3	2.5	3.0
79	Fremont Pass #2	"	Fremont Pass	2-8S-79W	11400	Arapaho	40.8	53.4	8.4	12.4
92	Monarch Pass	"	Monarch Pass	16-49N-6E	10500	Cochetopa	50.5	61.1	10.6	13.0
				Average for Drainage			29.9	37.2	6.5	8.3

*On adjacent drainage

@Average for period of record

